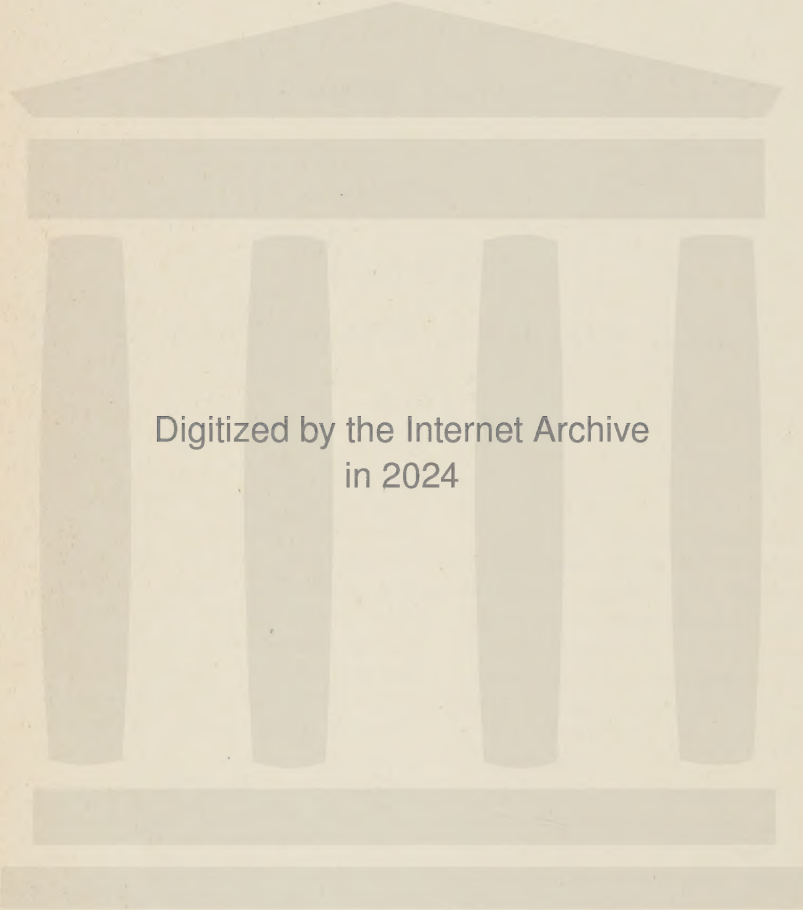


IL NUOVO CIMENTO

INDICI
DEL VOLUME XX - SERIE X
1961



Digitized by the Internet Archive
in 2024

INDICE SISTEMATICO PER NUMERI SUCCESSIVI DEL PERIODICO

N. 1 - 1° APRILE 1961

F. R. TANGHERLINI - On the energy-momentum tensor of the gravitational field	pag. 1
E. KAZES - Low energy limit of Compton scattering without T, C, P invariance	» 20
B. JOUVET - Les invariances de jauge classiques de l'électrodynamique quantique.	» 28
J. M. LOZANO and M. MOSHINSKY - Dispersion relations and the causality concept.	» 59
S. JHA, R. K. GUPTA, H. G. DEVARE, G. C. PRAMILA and K. P. GOPINATHAN - On the decay scheme of ^{128}Cs	» 76
G. BOATO, G. CASANOVA, G. SCOLES and M. E. VALLAURI - Vapour pressure of isotopic liquids - III: Some corrections to previous papers	» 87
L. COLLI, I. IORI, S. MICHELETTI and M. PIGNANELLI - The pick-up reaction on the nuclides ^{45}Sc , ^{51}V , ^{52}Cr , ^{54}Fe , ^{56}Fe , ^{55}Mn , ^{59}Co , ^{58}Ni , ^{60}Ni	» 94
A. KILDAL - On plasma oscillations with special emphasis on the Landau damping and the Gross gaps in the frequency spectrum	» 104
R. G. MOORHOUSE - Partial wave dispersion relations in \bar{K} -nucleon absorption - I.	» 123
D. M. BINNIE, S. L. DE S. BARROS and B. D. HYAMS - Photons from the radiative decay	» 140
G. CARERI and F. GAETA - Ionic recombination in liquid helium	» 152
M. M. ISLAM - Pion-hyperon scattering.	» 161

Lettere alla Redazione:

P. K. SRIVASTAVA - Polarization of \bar{p} in $\bar{p}O$ scattering	» 172
I. R. KENYON - Observation of a hyperfragment decay by π^0 emission	» 175
B. N. SUBBA RAO - $\beta^+ \rightarrow \gamma$ angular correlation in the decay of ^{22}Na	» 178
J. S. DOWKER - Application of the Chew and Low extrapolation procedure to $K^- + d \rightarrow Y + N + \pi$ absorption reactions.	» 182
N. CABIBBO and R. GATTO - Theoretical discussion of possible experiments with electron-positron colliding beams	» 185
V. DE ALFARO and C. ROSSETTI - A note on the deuteron photodisintegration	» 194
G. KALMAN - Collective motions in a plasma due to magnetic interaction	» 198
G. PÓCSIK - Propagators of a self-coupled spinor field in Edwards and Lieb's approximation.	» 201
G. MOHAN - The energy parameter in the dispersion relation	» 205

<i>Libri ricevuti e Recensioni</i>	» 208
--	-------

N. 2 - 16 APRILE 1961

B. H. BRANDEN, H. RASHID and R. G. MOORHOUSE - A model for S -wave $\bar{K}-N$ scattering	pag. 213
T. BOWEN, C. R. SUN and A. E. WERBROUCK - The determination of the sign of the asymmetry parameter in Λ^0 decay from the scattering of the decay proton	» 225
B. K. CHATTERJEE, G. T. MURTHY, S. NARANAN, B. V. SREEKANTAN and M. V. SRINIVASA RAO - Studies on extensive air showers - Part II: Sea level observations on the fluctuations in the densities of N -particles, in showers of the same size.	» 237
A. MARTIN and R. VINH MAU - Double dispersion relations for deuteron photo- and electrodisintegration.	» 246
P. BUDINI, L. TAFFARA and C. VIOLA - On a possible enhancement of relativistic increase in ionization	» 265
M. H. BLUE, J. J. LORD, J. G. PARKS and C. H. TSAO - Transverse momentum of particles emitted in 4.2 GeV proton-proton collisions. . . .	» 274
F. CALOGERO - Covariant spin operators and associated conservation laws for a spinor field	» 280
F. CALOGERO - Non-local transformations and non-local conservation laws for free fields	» 297
G. BONERA and P. DE STEFANO - Transient effects in nuclear magnetic resonance with the rotating co-ordinates method.	» 316
D. B. LICHTENBERG - On the observability of the signs of the strong interaction coupling constants	» 324
R. OEHME - Resonance poles and the reaction matrix	» 334
PH. MEYER, J. PRENTKI and Y. YAMAGUCHI - Proposal of an experiment on Σ^\pm -decays	» 344
G. CULLIGAN, D. HARTING, N. H. LIPMAN, L. MADANSKY and G. TIBELL - The decay of negative π -mesons stopped in light elements and insulators	» 351
F. DUIMIO and G. WOLTERS - Investigation of the possibility of a π - Λ resonance in the case of different parities of Λ and Σ	» 359
J. MANDELBROJT - Physical one-nucleon and two-nucleon wave functions in fixed source theory	» 366
D. BOCCALETTI, G. DE FRANCESCHI and C. GUALDI - A model for double photoproduction of charged pions - II.	» 375
R. VINH MAU and A. MARTIN - Scattering by a given class of non-central forces	» 390

Lettere alla Redazione:

J. DABROWSKI and A. SOBICZEWSKI - The effect of the exclusion principle on the real part of the optical potential	» 403
M. KAWAGUCHI, Y. MIYAMOTO and Y. FUJII - Effects of the γ - 3π interaction on photoreactions	» 408
N. CABIBBO - The nucleon core in high-energy neutrino processes	» 413
C. CASTAGNOLI, C. LAMBORIZIO, I. ORTALLI and A. BARBARO-GALTIERI - Azimuthal symmetry in 27 GeV jets	» 416

A. SALAM and J. C. WARD - Vector field associated with the unitary theory of the Sakata model.	pag. 419
E. R. CAIANIELLO and A. CAMPOLATTARO - A solvable model of field theory »	422

<i>Libri ricevuti e Recensioni</i>	» 427
--	-------

N. 3 - 1° MAGGIO 1961

G. BOZÓKI, E. FENYVES, E. GOMBOSI and P. SURÁNYI - Investigation of the mechanism of high energy nucleon-nucleus interaction	pag. 429
M. BERTOLOTTI and D. SETTE - On recombination processes in neutron-irradiated <i>n</i> -type germanium	» 438
S. BARKAN - Stopping power of C for ^{210}Po α -particles	» 443
S. BARKAN - Branching ratio of α and β emissions from ^{212}Bi (ThC)	» 450
E. P. GROSS - Structure of a quantized vortex in boson systems	» 454
M. FOWLER - Conditions for bound states with a given set of interaction poles in Chew-Mandelstam theory	» 478
A. BARBARO GALTIERI, G. BARONI, A. MANFREDINI, C. CASTAGNOLI, C. LAMBORIZIO and I. ORTALLI - Verification at 27 GeV of a formula for the determination of the primary energy of jets	» 487
LEKH VIR and P. S. GILL - Latitude-dependence of a Forbush type decrease »	498
E. F. BEALL, B. CORK, P. G. MURPHY and W. A. WENZEL - Properties of a spark chamber	» 502
G. FELSNER and M. E. ROSE - Effect of inelastic scattering on polarization asymmetry	» 509
J. HAMILTON, P. MENOTTI, T. D. SPEARMAN and W. S. WOOLCOCK - Evidence for pion-pion interactions from <i>s</i> -wave pion-nucleon scattering	» 519
H. C. CORBEN - Spin precession in classical relativistic mechanics	» 529
G. PUTZOLU - Radiative corrections to pion production in e^+e^- collisions »	542
M. M. ISLAM - K-meson-nucleon scattering	» 546
B. W. LEE and K. S. CHO - Modified static equations for the $K\pi$ -interaction. Effect of pion-pion resonance	» 553
R. INGRAHAM - Charge and current densities in the Faraday disc	» 570

Lettere alla Redazione:

K. MAEDA - Production of atmospheric neutrons by solar γ rays	» 587
S. L. GLASHOW - Muonium-antimuonium transitions	» 591
V. S. BARASHENKOV, H. J. KAISER and A. A. OGREBA - Electric and magnetic polarizabilities of the nucleon	» 593
A. VISCONTI - Some properties of the propagators of a scalar field interacting with himself	» 596
A. MINGUZZI - A note on production dispersion relation	» 599

<i>Libri Ricevuti e Recensioni</i>	» 601
--	-------

N. 4 - 16 MAGGIO 1961

R. S. MISHRA - A problem in shock waves.	pag. 605
G. GEROSA, G. LATMIRAL and R. VINCIGUERRA - Electromagnetic parameters of matter and conditions for physical realizability.	» 610
G. BIORCI, A. FERRO and G. MONTALENTI - On the nature of radiation damage due to fast neutron bombardment in ferromagnetic materials: very high permeability pure iron and nickel.	» 617
G. MANUZIO e S. VITALE - Diffusione elastica di raggi γ di 1.25 MeV in piombo.	» 638
G. ALEXANDER, J. AVIDAN, A. AVNI and G. YEKUTIELI - Meson production in nucleus-nucleus collisions.	» 648
G. BICZÓ, G. BOZÓKI, E. FENYVES and E. GOMBOSI - High-energy interactions of a heavy primary in emulsion.	» 662
P. G. BORDONI, M. NUOVO and L. VERDINI - Dynamic behaviour of polymethyl methacrylate between 60 and 300 °K.	» 667
H. M. NUSSENZVEIG - On the physical interpretation of complex poles of the S -matrix - II.	» 694
M. M. BLOCK - Three-body final states from K^- capture in helium and deuterium.	» 715
HELIUM CHAMBER COLLABORATION GROUP - K^- absorption in ^4He - I: The hyperon-pion resonance.	» 724
R. W. LARDNER - Unitarity and the Mandelstam representation - II.	» 733
E. ERIKSEN - Transformations of relativistic two-particle equations.	» 747
P. ROMAN - Correlation theory of stationary electromagnetic fields - III: The presence of random sources.	» 759
K. JOHNSON - Solution of the equations for the Green's functions of a two dimensional relativistic field theory.	» 773
S. OKUBO and R. E. MARSHAK - Note on the $\Delta I = \frac{1}{2}$ selection rule in the composite model of elementary particles.	» 791
W. KRÓLIKOWSKI - On weak pion interaction in non-leptonic hyperon decays.	» 797

Lettere alla Redazione:

M. BASSETTI - Photoproduction of neutral vector mesons.	» 803
G. BALDINI, L. DALLA CROCE and R. FIESCHI - X-ray induced conversion in the absorption bands of additively colored KCl.	» 806
P. BECKMANN - Some remarks on high-energy inelastic collisions with small momentum transfer.	» 812

<i>Libri ricevuti e Recensioni</i>	» 814
--	-------

N. 5 - 1° GIUGNO 1961

L. JÁNOSSY and P. RÓZSA - Maximum likelihood determination of the scattering constant of an emulsion track in the presence of noise.	pag. 817
G. BIZARD et J. SEGUINOT - Résolution électronique analogique de problèmes statistiques d'accumulation poissonnienne.	» 836

J. OSADA, D. R. DE OLIVEIRA, N. MARTINS and T. MIYAZIMA - A model of α -decay consistent with α -reactions	pag. 845
B. BHOWMIK, P. C. JAIN and P. C. MATHUR - The decay modes and lifetime of negative K-mesons	» 857
D. ITO, A. H. ZIMMERMAN, S. RAGUSA and T. MIYAZIMA - On the phenomenological analysis of the S-matrix in multiple production	» 878
G. M. MARCAZZAN, E. MENICHELLA SAETTA and F. TONOLINI - (n, α) and (n, p) reactions in CsI crystal with 14 MeV neutrons	» 903
B. BARSELLA and S. ROSATI - On the effect of n-p tensor forces in ${}^3\text{H}_\Lambda$ - I	» 914
L. COLLI, G. M. MARCAZZAN, F. MERZARI, P. G. SONA and P. TOMAŠ - Angular distribution of protons from the reaction ${}^{28}\text{Si}(n, p){}^{28}\text{Al}$	» 928
D. EVANS and R. R. HILLIER - Remarks upon the densitometry of the tracks of heavy nuclei in nuclear emulsion	» 936
S. CUNSOLO and P. MAZZOLDI - The influence of pressure on the mobility of electric charges in liquid helium II	» 949
V. DE ALFARO and T. REGGE - A discussion of the Noyes and Wong equation for potential scattering	» 956
A. TOMASINI - Superfluidity and perturbation expansion in a large Fermi system	» 963
V. BORTOLANI - Production of δ -electrons in distant collisions by charged ultrarelativistic particles	» 977
V. DE SANTIS - On some consequences of charge independence for K^+ -nucleon interactions	» 983
E. R. CAIANIELLO, H. UMEZAWA and B. PREZIOSI - Unitarity conditions in terms of propagation kernels	» 1001

Lettere alla Redazione:

J. R. SHEWELL - Uniqueness of the orbital angular momentum operators	» 1010
G. CVIJANOVICH, B. DAYTON, P. EGLI, B. KLAIBER, W. KOCH, M. NIKOLIĆ, R. SCHNEEBERGER, H. WINZELER, J. C. COMBE, W. M. GIBSON, W. O. LOCK, M. SCHNEEBERGER and G. VANDERHAEGHE - Nuclear excitation and multiple production in proton-nucleon collisions at CERN-PS energies	» 1012
C. BRICMAN, M. CSEJTHEY-BARTH, J. P. LAGNAUX and J. SACTON - Interaction of high energy protons from the CERN proton synchrotron with photographic emulsion nuclei	» 1017
A. P. BALANCHANDRAN and N. G. DESHPANDE - Some remarks on Sakurai's theory of strong interactions	» 1022
J. FRANKLIN and S. F. TUAN - Y^* and K^* in strong interactions	» 1024
K. KAWARABAYASHI - A note on the final state interaction in $\text{K}_{2\pi}^+$ decay	» 1030
M. GOURDIN - Some remarks about the photoproduction of strange particles	» 1035
E. R. CAIANIELLO and K. Y. SHEN - Interferences among Feynman graphs of different topology	» 1038
J. S. LOMONT and H. E. MOSES - Reply to Dr. Shewell's criticism	» 1042
A. BIETTI - α -particle wave functions and the muon capture in ${}^4\text{He}$	» 1043

<i>Libri ricevuti e Recensioni</i>	» 1046
--	--------

N. 6 - 16 GIUGNO 1961

P. BAREYRE, J. F. DETOEUF, L. W. SMITH, R. D. TRIPP and L. VAN ROSSUM - Polarization in proton-beryllium and proton-proton scattering at 1.7 GeV	pag. 1049
S. JHA, R. K. GUPTA, H. G. DEVARE and G. C. PRAMILA - Further studies on the decay of ^{132}Cs	» 1067
A. FINZI - Dimensionless quantities, spacelike intervals and proper time in general relativity	» 1079
G. SZAMOSI - A covariant formulation of quantum mechanics - I	» 1090
TSAI-CHÜ and C. SIMONIN-HAUDECOEUR - Direct electronic decay of three π^0 's emitted from an antineutron annihilation star	» 1102
H. KOBRAK - Internal pairs from π^- -proton interactions at rest.	» 1115
A. K. COMMON - An investigation of possible bound Σ -hyperon-nucleon systems and their decay	» 1133
D. K. RAY - On the electron paramagnetic resonance spectra of V^{3+} in corundum (Al_2O_3).	» 1148
A. ENGLER, F. FOSTER, T. L. GREEN and J. MULVEY - Primary cosmic ray α -particles - II	» 1157
M. GOURDIN and M. RIMPAULT - Associated production of strange particles	» 1166
A. MARTIN and GY. TARGONSKI - On the uniqueness of a potential fitting a scattering amplitude at a given energy.	» 1182
A. GOLDBERG - Magnetic dispersion corrections to elastic electron scattering	» 1191

Lettere alla Redazione:

P. GOLDHAMMER - A note on circular gravitational orbits	» 1205
W. M. LAYSON - Modification of the Chew-Low formula for the $(\frac{3}{2}, \frac{3}{2})$ $\pi\text{-N}^0$ resonance	» 1207
N. BALI, C. GARIBOTTI, J. J. GIAMBIAGI and A. PIGNOTTI - Relativistic pion-nucleon scattering with the determinantal method	» 1209
J. J. SAKURAI - Very preliminary evidence for even $K\Sigma$ parity from associated photoproduction	» 1212
B. D'ESPAGNAT - A proposed experimental test of the Day, Snow and Sucher argument based on antiproton annihilation into kaons	» 1217
I. FIDONE - Corrélation du champ électrique dans un plasma	» 1219
G. COSTA, F. FERRARI and M. PUSTERLA - Pion-hyperon resonance from \bar{K} nucleon Coulomb constructive S-wave parameters	» 1224
A. SALAM and J. C. WARD - On the symplectic symmetry	» 1228

<i>Libri ricevuti e Recensioni</i>	» 1231
--	--------

<i>Indici del Volume XX, Serie X.</i>	» 1233
---	--------

INDICE ALFABETICO DEGLI AUTORI

La sigla L. si riferisce alle *Lettere alla Redazione*.

ALEXANDER G., J. AVIDAN, A. AVNI and G. YEKUTIELI - Meson production in nucleus-nucleus collisions	pag. 648
AVIDAN J. (vedi ALEXANDER G.)	» 648
AVNI A. (vedi ALEXANDER G.)	» 648
BALACHANDRAN A. P. and N. G. DESHPANDE - Some remarks on Sakurai's theory of strong interactions (L.)	» 1022
BALDINI G., L. DALLA CROCE and R. FIESCHI - X-ray induced conversion in the absorption bands of additively colored KCl (L.)	» 806
BALI N., C. GARIBOTTI, J. J. GIAMBIAGI and A. PIGNOTTI - Relativistic pion-nucleon scattering with the determinantal method (L.)	» 1209
BARASHENKOV V. S., H. J. KAISER and A. A. OGREBA - Electric and magnetic polarizabilities of the nucleon (L.)	» 593
BARBARO GALTIERI A., G. BARONI, A. MANFREDINI, C. CASTAGNOLI, C. LAMBORIZIO and I. ORTALLI - Verification at 27 GeV of a formula for the determination of the primary energy of jets	» 487
BARBARO GALTIERI A. (vedi CASTAGNOLI C.) (L.)	» 416
BAREYRE P., J. F. DETOEUF, L. W. SMITH, R. D. TRIPP and L. VAN ROSSUM - Polarization in proton-beryllium and proton-proton scattering at 1.7 GeV	» 1049
BARKAN S. - Stopping power of C for ^{210}Po α -particles	» 443
BARKAN S. - Branching ratio of α and β emission from $^{112}\text{Bi}(\text{ThC})$	» 450
BARONI G. (vedi BARBARO GALTIERI A.)	» 487
BARSELLA B. and S. ROSATI - On the effect of n-p tensor forces in $^3\text{H}_\Lambda$ - I	» 914
BASSETTI M. - Photoproduction of neutral vector mesons (L.)	» 803
BEALL E. F., B. CORK, P. G. MURPHY and W. A. WENZEL - Properties of a spark chamber	» 502
BECKMANN P. - Some remarks on high-energy inelastic collisions with small momentum transfer (L.)	» 812
BERTOLOTTI M. and D. SETTE - On recombination processes in neutron-irradiated n-type germanium	» 438
BHOWMIK B., P. C. JAIN and P. C. MATHUR - The decay modes and lifetime of negative K-mesons	» 857
BICZÓ G., G. BOZÓKI, E. FENYVES and E. GOMBOSI - High-energy interactions of a heavy primary in emulsion	» 662
BIETTI A. - α -particle wave functions and the muon capture in ^4He (L.)	» 1043
BINNIE D. M., S. L. DE S. BARROS and B. D. HYAMS - Photons from the radiative pion decay	» 140
BIORCI G., A. FERRO and G. MONTALENTI - On the nature of radiation damage due to fast neutron bombardment in ferromagnetic materials: very high permeability pure iron and nickel	» 617
BIZARD G. et J. SEGUINOT - Résolution électronique analogique de problèmes statistiques d'accumulation poissonienne	» 836
BLOCK M. M. - Three-body final states from K^- -capture in helium and deuterium	» 715

BLOCK M. M., E. B. BRUCKER, R. GESSAROLI, T. KIKUCHI, A. KOVACS, C. M. MELTZER, R. KRAEMER, M. NUSSBAUM, A. PEVSNER, P. SCHLEIN, R. STRAND, H. O. COHN, E. M. HARTH, J. LEITNER, L. LENDINARA, L. MONARI and G. PUPPI - K^- absorption in ^4He . - I. The hyperon- pion resonance	pag. 724
BLUE M. H., J. J. LORD, J. G. PARKS and C. H. TSAO - Transverse momen- tum of particles emitted in 4.2 GeV proton-proton collisions	» 274
BOATO G., G. CASANOVA, G. SCOLES and M. E. VALLAURI - Vapour pres- sure of isotopic liquids. - III. Some corrections to previous papers . . .	» 87
BOCCALETTI D., G. DE FRANCESCHI and C. GUALDI - A model for double photoproduction of charged pions. - II	» 375
BONERA G. and P. DE STEFANO - Transient effects in nuclear magnetic resonance with the rotating co-ordinates method	» 316
BORDONI P. G., M. NUOVO and L. VERDINI - Dynamic behaviour of polymethyl methacrylate between 60 and 300 °K	» 667
BORTOLANI V. - Production of δ -electrons in distant collisions by charged ultrarelativistic particles.	» 977
BOWEN T., C. R. SUN and A. E. WERBROUCK - The determination of the sign of the asymmetry parameter in Λ^0 decay from the scattering of the decay proton.	» 225
BOZÓKI G., E. FENYVES, E. GOMBOSI and P. SURÁNYI - Investigation of the mechanism of high-energy nucleon-nucleus interaction	» 429
BOZÓKI G. (vedi BICZÓ G.)	» 662
BRANDEN B. H., H. RASHID and R. G. MOORHOUSE - A model for S -wave $\bar{K}-N$ scattering	» 213
BRICMAN C., M. CSEJTHEY-BARTH, J. P. LAGNAUX and J. SACTON - Inter- raction of high-energy protons from the CERN proton synchrotron with photographic emulsion nuclei (L.)	» 1017
BRUCKER E. B. (vedi BLOCK M. M.)	» 724
BUDINI P., L. TAFFARA and C. VIOLA - On a possible enhancement of relativistic increase in ionization	» 265
CABIBBO N. - The nuclear core in high-energy neutrino processes (L.) . . .	» 413
CABIBBO N. and R. GATTO - Theoretical discussion of possible experiments with electron-positron colliding beams (L.)	» 185
CAIANIELLO E. R. and A. CAMPOLATTARO - A solvable model of field theory (L.)	» 422
CAIANIELLO E. R. and K. Y. SHEN - Interferences among Feynman graphs of different topology (L.)	» 1038
CAIANIELLO E. R., H. UMEZAWA and B. PREZIOSI - Unitarity conditions in terms of propagation kernels	» 1001
CALOGERO F. - Covariant spin operators and associated conservation laws for a spinor field	» 280
CALOGERO F. - Non-local transformations and non-local conservation laws for free fields	» 297
CAMPOLATTARO A. (vedi CAIANIELLO E. R.) (L.)	» 422
CARERI G. and F. GAETA - Ionic recombination in liquid helium	» 152
CASANOVA G. (vedi BOATO G.)	» 87
CASTAGNOLI C., C. LAMBORIZIO, I. ORTALLI and A. BARBARO-GALTIERI - Azimuthal symmetry in 27 GeV jets (L.)	» 416
CASTAGNOLI C. (vedi BARBARO GALTIERI A.)	» 487

CHATTERJEE B. K., G. T. MURTHY, S. NARANAN, B. V. SREEKANTAN and M. V. SRINIVASA RAO - Studies on extensive air showers. - Part II. Sea level observations on the fluctuations in the densities of N-particles, in showers of the same size	pag. 237
CHO K. S. (vedi LEE B. W.)	» 553
COHN H. O. (vedi BLOCK M. M.)	» 724
COLLI L., G. M. MARCAZZAN, F. MERZARI, P. G. SONA and P. TOMAŠ - Angular distribution of protons from the reaction $^{18}\text{Si}(n, p)^{28}\text{Al}$	» 928
COLLI L., I. IORI, S. MICHELETTI and M. PIGNANELLI - The pick-up reaction on the nuclides ^{45}Se , ^{51}V , ^{52}Cr , ^{54}Fe , ^{56}Fe , ^{55}Mn , ^{59}Co , ^{58}Ni , ^{60}Ni	» 94
COMBE J. C. (vedi CVIJANOVICH G.) (L.)	» 1012
COMMON A. K. - An investigation of possible bound Σ -hyperon-nucleon systems and their decay	» 1133
CORBEN H. C. - Spin precession in classical relativistic mechanics	» 529
CORK B. (vedi BEALL E. F.)	» 502
COSTA G., F. FERRARI and M. PUSTERLA - Pion-hyperon resonance from \bar{K} -nucleon Coulomb constructive S-wave parameters (L.)	» 1224
CSEJTHEY-BARTH M. (vedi BRICMAN C.) (L.)	» 1017
CULLIGAN G., D. HARTING, N. H. LIPMAN, L. MADANSKY and G. TIBELL - The decay of negative π -mesons stopped in light elements and insulators . .	» 351
CUNSOLO S. and P. MAZZOLDI - The influence of pressure on the mobility of electric charges in liquid helium II.	» 949
CVIJANOVICH G., B. DAYTON, P. EGLI, B. KLAIBER, W. KOCK, M. NICOLIĆ, R. SCHNEEBERGER, H. WINZELER, J. C. COMBE, W. M. GIBSON, W. O. LOCK, M. SCHNEEBERGER and G. VANDERHAEGHE - Nuclear excitation and multiple production in proton-nucleon collisions at CERN-PS energies (L.)	» 1012
DABROWSKI J. and A. SOBICZEWSKI - The effect of the exclusion principle on the real part of the optical potential (L.)	» 403
DALLA CROCE L. (vedi BALDINI G.) (L.)	» 806
DAYTON B. (vedi CVIJANOVICH) (L.)	» 1012
DE ALFARO V. and T. REGGE - A discussion of the Noyes and Wong equation for potential scattering	» 956
DE ALFARO V. and C. ROSSETTI - A note on the deuteron photodisinte- gration (L.)	» 194
DE FRANCESCHI G. (vedi BOCCALETTI D.)	» 375
DE OLIVEIRA D. R. (vedi OSADA J.)	» 845
DE SANTIS V. - On some consequences of charge independence for K^+ - nucleon interactions	» 983
DE S. BARROS S. L. (vedi BINNIE D. M.)	» 140
DESHPANDE N. G. (vedi BALACHANDRAN A. P.) (L.)	» 1022
D'ESPAGNAT B. - A proposed experimental test of the Day, Snow and Sucher argument based on antiproton annihilation into kaons (L.) . .	» 1217
DE STEFANO P. (vedi BONERA G.)	» 316
DETOEUF J. F. (vedi BAREYRE P.)	» 1049
DEVARE H. G. (vedi JHA S.)	» 76
DEVARE H. G. (vedi JHA S.)	» 1067
DOWKER J. S. - Application of the Chew and Low extrapolat on procedure to $K^- + d \rightarrow Y + N + \pi$ absorption reactions (L.)	» 182
DUIMIO F. and G. WOLTERS - Investigation of the possibility of a π - Λ resonance in the case of different parities of Λ and Σ	» 359

EGLI P. (vedi CVIJANOVICH G.) (L.)	pag. 1012
ENGLER A., F. FOSTER, T. L. GREEN and J. MULVEY - Primary cosmic ray α -particles. - II	» 1157
ERIKSEN E. - Transformations of relativistic two-particle equations	» 747
EVANS D. and R. R. HILLIER - Remarks upon the densitometry of the tracks of heavy nuclei in nuclear emulsion	» 936
FELSNER G. and M. E. ROSE - Effect of inelastic scattering on polarization asymmetry.	» 509
FENYVES E. (vedi BOZÓKI G.)	» 429
FENYVES E. (vedi BILZÓ G.)	» 662
FERRARI F. (vedi COSTA G.) (L.)	» 1224
FERRO A. (vedi BIORCI G.)	» 617
FIDONE I. - Corrélation du champ électrique dans un plasma (L.)	» 1219
FIESCHI R. (vedi BALDINI G.) (L.)	» 806
FINZI A. - Dimensionless quantities, spacelike intervals and proper time in general relativity	» 1079
FOSTER F. (vedi ENGLER A.)	» 1157
FWLER M. - Conditions for bound states with a given set of interaction poles in Chew-Mandelstam theory	» 478
FRANKLIN J. and S. F. TUÁN - Y^* and K^* in strong interactions (L.) . . .	» 1024
FUJII Y. (vedi KAWAGUCHI M.) (L.)	» 408
GAETA F. (vedi CARERI G.)	» 152
GARIBOTTI C. (vedi BALI N.) (L.)	» 1209
GATTO R. (vedi CABIBBO N.) (L.)	» 185
GEROSA G., G. LATMIRAL and R. VINCIGUERRA - Electromagnetic parameters of matter and conditions for physical realizability	» 610
GESSAROLI R. (vedi BLOCK M. M.)	» 724
GIAMBIAGI J. J. (vedi BALI N.) (L.)	» 1209
GIBSON W. M. (vedi CVIJANOVICH G.) (L.)	» 1012
GILL P. S. (vedi VIR L.)	» 498
GLASHOW S. L. - Muonium-antimuonium transitions (L.)	» 591
GOLDBERG A. - Magnetic dispersion corrections to elastic electron scattering . . .	» 1191
GOLDHAMMER P. - A note on circular gravitational orbits (L.)	» 1205
GOMBOSI E. (vedi BICZÓ G.)	» 662
GOMBOSI E. (vedi BOZÓKI G.)	» 429
GOPINATHAN K. P. (vedi JHA S.)	» 76
GOURDIN M. - Some remarks about the photoproduction of strange particles (L.)	» 1035
GOURDIN M. and M. RIMPAULT - Associated production of strange particles . . .	» 1166
GREEN T. L. (vedi ENGLER A.)	» 1157
GROSS E. P. - Structure of a quantized vortex in boson systems	» 454
GUALDI C. (vedi BOCCALETTI D.)	» 375
GUPTA R. K. (vedi JHA S.)	» 76
GUPTA R. K. (vedi JHA S.)	» 1067
HAMILTON J., P. MENOTTI, T. D. SPEARMAN and W. S. WOOLCOCK - Evidence for pion-pion interactions from s-wave pion-nucleon scattering . . .	» 519
HARTH E. M. (vedi BLOCK M. M.)	» 724
HARTING D. (vedi CULLIGAN G.)	» 351
HILLIER R. R. (vedi EVANS D.)	» 936
HYAMS B. D. (vedi BINNIE D. M.)	» 140
INGRAHAM R. - Charge and current densities in the Faraday disc	» 570

IORI I. (vedi COLLI L.)	pag.	94
ISLAM M. M. - Pion-hyperon scattering '	»	161
ISLAM M. M. - K-meson-nucleon scattering	»	546
ITO D., A. H. ZIMERMAN, S. RAGUSA and T. MIYAZIMA - On the phenomenological analysis of S -matrix in multiple production	»	878
JAIN P. C. (vedi BHOWMIK B.)	»	857
JÁNÓSSY L. and P. RÓZSA - Maximum likelihood determination of the scattering constant of an emulsion track in the presence of noise. . .	»	817
JHA S., R. K. GUPTA, H. G. DEVARE, G. C. PRAMILA and K. P. GOPINATHAN - On the decay scheme of ^{128}Cs	»	76
JHA S., R. K. GUPTA, H. G. DEVARE and G. C. PRAMILA - Further studies on the decay of ^{132}Cs	»	1067
JOHNSON K. - Solution of the equations for the Green's functions of a two dimensional relativistic field theory	»	773
JOUVET B. - Les invariances de jauge classiques de l'électrodynamique quantique	»	28
KAISER H. J. (vedi BARASHENKOV V. S.) (L.)	»	593
KALMAN G. - Collective motions in a plasma due to magnetic interaction (L.)	»	198
KAWAGUCHI M., Y. MIYAMOTO and Y. FUJII - Effects of the γ - 3π interaction on photoreactions (L.)	»	408
KAWARABAYASHI K. - A note on the final state interaction in $K_{2\pi}^+$ -decay (L.)	»	1030
KAZES E. - Low energy limit of Compton scattering without T, C, P invariance	»	20
KENYON I. R. - Observation of a hyperfragment decay by π^0 emission (L.)	»	175
KIKUCHI T. (vedi BLOCK M. M.)	»	724
KILDAL A. - On plasma oscillations with special emphasis on the Landau damping and the Gross gaps in the frequency spectrum	»	104
KLAIBER B. (vedi CVIJANOVICH G.) (L.)	»	1012
KOBRAK H. - Internal pairs from π -proton interactions at rest.	»	1115
KOCH W. (vedi CVIJANOVICH G.) (L.)	»	1012
KOVACS A. (vedi BLOCK M. M.)	»	724
KRAEMER R. (vedi BLOCK M. M.)	»	724
KRÓLIKOWSKI W. - On weak pion interaction in non-leptonic hyperon decays.	»	797
LAGNAUX J. P. (vedi BRICMAN C.) (L.)	»	1017
LAMBORIZIO C. (vedi BARBARO GALTIERI A.)	»	487
LAMBORIZIO C. (vedi CASTAGNOLI C.) (L.)	»	416
LARDNER R. W. - Unitarity and the Mandelstam representation. - II	»	733
LATMIRAL G. (vedi GEROSA G.)	»	610
LAYSON W. M. - Modification of the Chew-Low formula for the $(\frac{3}{2}, \frac{3}{2}) \pi\text{-}\mathcal{N}$ resonance (L.)	»	1207
LEE B. W. and K. S. CHO - Modified static equations for the $K\pi$ -interaction. Effect of pion-pion resonance	»	553
LEITNER J. (vedi BLOCK M. M.)	»	724
LENDINARA L. (vedi BLOCK M. M.)	»	724
LICHTENBERG D. B. - On the observability of the signs of the strong interaction coupling constants	»	324
LIPMAN N. H. (vedi CULLIGAN G.)	»	351
LOCK W. O. (vedi CVIJANOVICH G.) (L.)	»	1012
LOMONT J. S. and H. E. MOSES - Reply to Dr. Shewell's criticism (L.)	»	1042

LORD J. J. (vedi BLUE M. H.)	pag. 274
LOVELACE C. - On the existence of solution of the pion-pion dispersion equations. - I	" 903
LOZANO J. M. and M. MOSHINSKY - Dispersion relations and the causality concept	" 59
MADANSKY L. (vedi CULLIGAN G.)	" 351
MAEDA K. Production of atmospheric neutrons by solar γ -rays (L.)	" 587
MANDELBROJT J. - Physical one-nucleon and two-nucleon wave functions in fixed source theory	" 366
MANFREDINI A. (vedi BARBARO GALTIERI A.)	" 487
MANUZIO G. e S. VITALE - Diffusione elastica di raggi γ di 1.25 MeV in piombo	" 638
MARCAZZAN G. M., E. MENICHELLA SAETTA and F. TONOLINI - (n, α) and (n, p) reactions in CsI crystal with 14 MeV neutrons	" 903
MARCAZZAN G. M. (vedi COLLI L.)	" 928
MARSHAK R. E. (vedi OKUBO S.)	" 791
MARTIN A. and Gy. TARGONSKI - On the uniqueness of a potential fitting a scattering amplitude at a given energy.	" 1182
MARTIN A. and R. VINH MAU - Double dispersion relations for deuteron photo- and electrodisintegration	" 246
MARTIN A. (vedi VINH MAU R.)	" 390
MARTINS N. (vedi OSADA J.)	" 845
MATHUR P. C. (vedi BHOWMIK B.)	" 857
MAZZOLDI P. (vedi CUNSOLO S.)	" 949
MELTZER C. M. (vedi BLOCK M. M.)	" 724
MENICHELLA SAETTA E. (vedi MARCAZZAN G. M.)	" 903
MENOTTI P. (vedi HAMILTON J.)	" 519
MERZARI F. (vedi COLLI L.)	" 928
MEYER PH., J. PRENTKI and Y. YAMAGUCHI - Proposal of an experiment on Σ^\pm -decays	" 344
MICHELETTI S. (vedi COLLI L.)	" 94
MINGUZZI A. - A note on production dispersion relation (L.)	" 599
MISHRA R. S. - A problem in shock waves	" 605
MIYAMOTO Y. (vedi KAWAGUCHI M.) (L.)	" 408
MIYAZIMA T. (vedi OSADA J.)	" 845
MIYAZIMA T. (vedi ITO D.)	" 878
MOHAN G. - The energy parameter in the dispersion relation (L.)	" 205
MONARI L. (vedi BLOCK M. M.)	" 724
MONTALENTI G. (vedi BIORCI G.)	" 617
MOORHOUSE R. G. - Partial wave dispersion relations in K-nucleon absorption. - I	" 123
MOORHOUSE R. G. (vedi BRANSDEN B. H.)	" 213
MOSES H. E. (vedi LOMONT J. S.) (L.)	" 1042
MOSHINSKY M. (vedi LOZANO J. M.)	" 59
MULVEY J. (vedi ENGLER A.)	" 1157
MURPHY P. G. (vedi BEALL E. F.)	" 502
MURTHY G. T. (vedi CHATTERJEE B. K.)	" 237
NARANAN S. (vedi CHATTERJEE B. K.)	" 237
NIKOLIĆ M. (vedi CVIJANOVICH G.) (L.)	" 1012
NUOVO M. (vedi BORDONI P. G.)	" 667

NUSSBAUM M. (vedi BLOCK M. M.)	pag. 724
NUSSENZVEIG H. M. - On the physical interpretation of complex poles of the S -matrix. - II	» 694
OEHME R. - Resonance poles and the reaction matrix	» 334
OGREBA A. A. (vedi BARASHENKOV V. S.) (L.)	» 593
OKUBO S. and R. E. MARSHAK - Note on the $\Delta I = \frac{1}{2}$ selection rule in the composite model of elementary particles	» 791
ORTALLI I. (vedi BARBARO GALTIERI A.)	» 487
ORTALLI I. (vedi CASTAGNOLI C.) (L.)	» 416
OSADA J., R. D. DE OLIVEIRA, N. MARTINS and T. MIYAZIMA - A model of α -decay consistent with α -reactions	» 845
PARKS J. F. (vedi BLUE M. H.)	» 274
PEVSNER A. (vedi BLOCK M. M.)	» 724
PIGNANELLI M. (vedi COLLI L.)	» 94
PIGNOTTI A. (vedi BALI N.) (L.)	» 1209
PÓCSIK G. - Propagators of a self-coupled spinor field in Edwards and Lieb's approximation (L.)	» 201
PRAMILA G. C. (vedi JHA S.)	» 76
PRAMILA G. C. (vedi JHA S.)	» 1067
PRENTKI J. (vedi MEYER PH.)	» 344
PREZIOSI B. (vedi CAIANIELLO E. R.)	» 1601
PUPPI G. (vedi BLOCK M. M.)	» 724
PUSTERLA M. (vedi COSTA G.) (L.)	» 1224
PUTZOLU G. - Radiative corrections to pion production in e^+e^- collisions	» 542
RAGUSA S. (vedi ITO D.)	» 878
RASHID H. (vedi BRANDEN B. H.)	» 213
RAY D. K. - On the electron paramagnetic resonance spectra of V^{3+} in corundum (Al_2O_3)	» 1148
REGGE T. (vedi DE ALFARO V.)	» 956
RIMPAULT M. (vedi GOURDIN M.)	» 1166
ROMAN P. - Correction theory of stationary electromagnetic fields. - Part III. The presence of random sources	» 759
ROSATI S. (vedi BARSELLA B.)	» 914
ROSE M. E. (vedi FELSNER G.)	» 509
ROSSETTI C. (vedi DE ALFARO V.) (L.)	» 194
RÓZSA P. (vedi JÁNOSSY L.)	» 817
SACTON J. (vedi BRICMAN C.) (L.)	» 1017
SAKURAI J. J. - Very preliminary evidence for even $K\Sigma$ parity from associated photoproduction (L.)	» 1212
SALAM A. and J. C. WARD - On the symplectic symmetry (L.)	» 1228
SALAM A. and J. C. WARD - Vector fields associated with the unitary theory of the Sakata model (L.)	» 419
SCHLEIN P. (vedi BLOCK M. M.)	» 724
SCHNEEBERGER M. (vedi CVIJANOVICH G.) (L.)	» 1012
SCHNEEBERGER R. (vedi CVIJANOVICH G.) (L.)	» 1012
SCOLES G. (vedi BOATO G.)	» 87
SEGUINOT J. (vedi BIZARD G.)	» 836
SETTE D. (vedi BERTOLOTTI M.)	» 438
SHEN K. Y. (vedi CAIANIELLO E. R.) (L.)	» 1038
SHEWELL J. R. - Uniqueness of the orbital angular momentum operators (L.)	» 1010

SIMONIN-HAUDECOEUR C. (vedi TSai-CHÜ)	pag. 1102
SMITH L. W. (vedi BAREYRE P.)	» 1049
SOBICZEWSKI A. (vedi DABROWSKI J.) (L.)	» 403
SONA P. G. (vedi COLLI L.)	» 928
SPEARMAN T. D. (vedi HAMILTON J.)	» 519
SREEKANTAN B. V. (vedi CHATTERJEE B. K.)	» 237
SRINIVASA RAO M. V. (vedi CHATTERJEE B. K.)	» 237
SRIVASTAVA P. K. - Polarization of \bar{p} in $\bar{p}C$ scattering (L.)	» 172
STRAND R. (vedi BLOCK M. M.)	» 724
SUBBA RAO B. N. - $\beta^+ \rightarrow \gamma$ angular correlation in the decay of ^{22}Na (L.)	» 178
SUN C. R. (vedi BOWEN T.)	» 225
SURÁNYI P. (vedi BOZÓKI G.)	» 429
SZAMOSI G. - A covariant formulation of quantum mechanics - I	» 1090
TAFFARA L. (vedi BUDINI P.)	» 265
TANGHERLINI F. R. - On the energy-momentum tensor of the gravitational field	» 1
TARGONSKI GY. (vedi MARTIN A.)	» 1182
TIBELL G. (vedi CULLIGAN G.)	» 351
TOMAŠ P. (vedi COLLI L.)	» 928
TOMASINI A. - Superfluidity and perturbation expansion in a large Fermi system	» 963
TONOLINI F. (vedi MARCAZZAN G. M.)	» 903
TRIPP R. D. (vedi BAREYRE P.)	» 1049
TSai-CHÜ and C. SIMONIN-HAUDECOEUR - Direct electronic decay of three π^0 's emitted from an antineutron annihilation star	» 1102
TSao C. H. (vedi BLUE M. H.)	» 274
TUAN S. F. (vedi FRANKLIN J.) (L.)	» 1024
UMEZAWA H. (vedi CAIANIELLO E. R.)	» 1001
VALLAURI M. E. (vedi BOATO G.)	» 87
VANDERHAEGHE G. (vedi CVIJANOVICH) (L.)	» 1012
VAN ROSSUM L. (vedi BAREYRE P.)	» 1049
VERDINI L. (vedi BORDONI P. G.)	» 667
VINCIGUERRA R. (vedi GEROSA G.)	» 610
VINH MAU R. (vedi MARTIN A.)	» 246
VINH MAU R. and A. MARTIN - Scattering by a given class of non-central forces	» 390
VIOLA C. (vedi BUDINI P.)	» 265
VIR L. and P. S. GILL - Latitude-dependence of a Forbush type decrease	» 498
VISCONTI A. - Some properties of the propagators of a scalar field interacting with himself (L.)	» 596
VITALE S. (vedi MANUZIO G.)	» 638
WARD J. C. (vedi SALAM A.) (L.)	» 419
WARD J. C. (vedi SALAM A.) (L.)	» 1228
WENZEL W. A. (vedi BEALL E. F.)	» 502
WERBROUCK A. E. (vedi BOWEN T.)	» 225
WINZELER H. (vedi CVIJANOVICH G.) (L.)	» 1012
WOLTERS G. (vedi DUIMIO F.)	» 359
WOOLCOCK W. S. (vedi HAMILTON J.)	» 519
YAMAGUCHI Y. (vedi MEYER PH.)	» 344
YEKUTIELI G. (vedi ALEXANDER G.)	» 648
ZIMMERMAN A. H. (vedi ITO D.)	» 878

INDICE ANALITICO PER MATERIE

APPARATI, STRUMENTI - TECNICHE SPERIMENTALI

Maximum likelihood determination of the scattering constant of an emulsion track in the presence of noise, <i>L. Janossy</i> and <i>P. Rozsa</i>	pag. 817
Properties of a spark chamber, <i>E. F. Beall</i> , <i>B. Cork</i> , <i>P. G. Murphy</i> and <i>W. A. Wenzel</i>	» 502
Remarks upon the densitometry of the tracks of heavy nuclei in nuclear emulsion, <i>D. Evans</i> and <i>R. R. Hillier</i>	» 936

ELETTRODINAMICA E TEORIA DEI CAMPI

Conditions for bound states with a given set of interaction poles in Chew-Mandelstam theory, <i>M. Fowler</i>	» 478
Covariant spin operators and associated conservation laws for a spinor field, <i>F. Calogero</i>	» 280
Dispersion relations and the causality concept, <i>J. M. Lozano</i> and <i>M. Moshinsky</i>	» 59
Double dispersion relations for deuteron photo- and electrodisintegration, <i>A. Martin</i> and <i>R. Vinh Mau</i>	» 246
Effects of the γ - 3π interaction on photoreactions (L.), <i>M. Kawaguchi</i> , <i>Y. Miyamoto</i> and <i>Y. Fujii</i>	» 408
Electric and magnetic polarizabilities of the nucleon (L.), <i>V. S. Barashenkov</i> , <i>H. J. Kaiser</i> and <i>A. A. Ogreba</i>	» 593
Energy parameter in the dispersion relation (The) (L.), <i>G. Mohan</i>	» 205
Interferences among Feynman graphs of different topology (L.), <i>E. R. Caianiello</i> and <i>K. Y. Shen</i>	» 1038
Invariances de jauge classiques de l'électrodynamique quantique (Les), <i>B. Jouvét</i>	» 28
Investigation of the mechanism of high energy nucleon-nucleus interaction, <i>G. Bozóki</i> , <i>E. Fenyves</i> , <i>E. Gombosi</i> and <i>P. Surányi</i>	» 429
Low-energy limit of Compton scattering without T , C , P invariance, <i>E. Kazes</i>	» 20
Magnetic dispersion corrections to elastic electron scattering, <i>A. Goldberg</i>	» 1191
Model for double photoproduction of charged pions - II (A), <i>D. Boccaletti</i> , <i>G. De Franceschi</i> and <i>C. Gualdi</i>	» 375
Non-local transformations and non-local conservation laws for free fields, <i>F. Calogero</i>	» 297
Nucleon core in high-energy neutrino processes (The) (L.), <i>N. Cabibbo</i>	» 413
Observability of the signs of the strong interaction coupling constants (On the), <i>D. B. Lichtenberg</i>	» 324
Phenomenological analysis of S -matrix in multiple production (On the), <i>D. Ito</i> , <i>A. H. Zimmerman</i> , <i>S. Ragusa</i> , <i>T. Miyazima</i>	» 878

Photoproduction of neutral vector mesons (L.), <i>M. Bassetti</i>	pag. 803
Physical one-nucleon and two-nucleon wave functions in fixed source theory, <i>J. Mandelbrojt</i>	» 366
Possible enhancement of relativistic increase in ionization (On a), <i>P. Bordini, L. Taffara and C. Viola</i>	» 265
Production dispersion relation (A note on) (L.), <i>A. Minguzzi</i>	» 599
Production of δ -electrons in distant collisions by charged ultrarelativistic particles, <i>V. Bortolani</i>	» 977
Propagators of a self-coupled spinor field in Edwards and Lieb's approximation (L.), <i>G. Pócsik</i>	» 201
Properties of the propagators of a scalar field interacting with himself (Some) (L.), <i>A. Visconti</i>	» 596
Radiative corrections to pion production in e^+e^- collisions, <i>G. Putzolu</i>	» 542
Relativistic pion-nucleon scattering with the determinantal method (L.), <i>N. Bali, C. Garibotti, J. J. Giambiagi and A. Pignotti</i>	» 1209
Remarks on high-energy inelastic collisions with small momentum transfer (Some) (L.), <i>P. Beckmann</i>	» 812
Remarks on Sakurai's theory of strong interactions (Some) (L.), <i>A. P. Balachandran and N. G. Deshpande</i>	» 1022
Reply to Dr. Shewell's criticism (L.), <i>J. S. Lomont and H. E. Moses</i>	» 1042
Solution of the equations for the Green's functions of a two dimensional relativistic field theory, <i>K. Johnson</i>	» 773
Solvable model of field theory (A) (L.), <i>E. R. Caianiello and A. Campo-lattaro</i>	» 422
Structure of a quantized vortex in boson systems, <i>E. P. Gross</i>	» 454
Superfluidity and perturbation expansion in a large Fermi system, <i>A. Tomasini</i>	» 963
The $\Delta I = \frac{1}{2}$ selection rule in the composite model of elementary particles (Note on), <i>S. Okubo and R. E. Marshak</i>	» 791
Theoretical discussion of possible experiments with electron-positron colliding beams (L.), <i>N. Cabibbo and R. Gatto</i>	» 185
Unitarity and the Mandelstam representation - II, <i>R. W. Lardner</i>	» 733
Unitarity conditions in terms of propagation kernels, <i>E. R. Caianiello, H. Umezawa and B. Preziosi</i>	» 1001
Vector fields associated with the unitary theory of the Sakata model (L.), <i>A. Salam and J. C. Ward</i>	» 419

ELETTROMAGNETISMO

Charge and current densities in the Faraday disc, <i>R. Ingraham</i>	» 570
Correlation theory of stationary electromagnetic fields - III: The presence of random sources, <i>P. Roman</i>	» 759
Electromagnetic parameters of matter and conditions for physical realizability, <i>G. Gerosa, G. Latmiral and R. Vinciguerra</i>	» 610

IDRO E MAGNETODINAMICA

Problem in shock waves (A), <i>R. S. Mishra</i>	» 605
---	-------

IPERONI E IPERNUCLEI

Determination of the sign of the asymmetry parameter in Λ^0 decay from the scattering of the decay proton (The), <i>T. Bowen, C. R. Sun and A. E. Werbrouck</i>	pag. 225
Effect of n-p tensor forces in ${}^3\text{H}_\Lambda$ - I (On the), <i>B. Barsella and S. Rosati</i> »	914
Investigation of possible bound Σ -hyperon-nucleon systems and their decay (Λn), <i>A. K. Common</i>	» 1133
Investigation of the possibility of a π - Λ resonance in the case of different parities of Λ and Σ , <i>F. Duimio and G. Wolters</i>	» 359
Observation of a hyperfragment decay by π^0 emission (L.), <i>I. R. Kenyon</i> »	175
Preliminary evidence for even $\text{K}\Sigma$ parity from associated photoproduction (Very) (L.), <i>J. J. Sakurai</i>	» 1212
Proposal of an experiment on Σ^\pm -decays, <i>Ph. Meyer, J. Prentki and Y. Yamaguchi</i>	» 344
Weak pion interaction in non-leptonic hyperon decays (On), <i>W. Królkowski</i>	» 797
Y^* and K^* in strong interactions (L.), <i>J. Franklin and S. F. Tuan</i> .	» 1024

LIQUIDI E SOLIDI - MOLECOLE

Dynamic behaviour of polymethyl methacrylate between 60 and 300 °K, <i>P. G. Bordoni, M. Nuovo and L. Verdini</i>	» 667
Electron paramagnetic resonance spectra of V^{3+} in corundum (Al_2O_3) (On the), <i>D. K. Ray</i>	» 1148
Influence of pressure on the mobility of electric charges in liquid helium II (The), <i>S. Cunsolo and P. Mazzoldi</i>	» 949
Ionic recombination in liquid helium, <i>G. Careri and F. Gaeta</i>	» 152
Nature of radiation damage due to fast neutron bombardment in ferromagnetic materials: very high permeability pure iron and nickel (On the), <i>G. Biorci, A. Ferro and G. Montalenti</i>	» 617
Recombination processes in neutron-irradiated n-type germanium (On), <i>M. Bertolotti and D. Sette</i>	» 438
Transient effects in nuclear magnetic resonance with the rotating co-ordinates method, <i>G. Bonera and P. De Stefano</i>	» 316
Vapour pressure of isotopic liquids - III: Some corrections to previous papers, <i>G. Boato, G. Csanova, G. Scoles and M. E. Vallauri</i> . . .	» 87
X-ray induced conversion in the absorption bands of additively colored KCl (L.), <i>G. Baldini, L. Dalla Croce and R. Fieschi</i>	» 806

MECCANICA QUANTISTICA

Covariant formulation of quantum mechanics - I (A), <i>G. Szamosi</i> . .	» 1090
Discussion of the Noyes and Wong equation for potential scattering, <i>V. De Alfaro and T. Regge</i>	» 956
Physical interpretation of complex poles of the S-matrix - II (On the), <i>H. M. Nussenzveig</i>	» 694

Resonance poles and the reaction matrix, <i>R. Oehme</i>	pag. 334
Scattering by a given class of non-central forces, <i>R. Vinh Mau</i> and <i>A. Martin</i>	» 390
Transformations of relativistic two-particle equations, <i>E. Eriksen</i> . .	» 747
Uniqueness of a potential fitting a scattering amplitude at a given energy (On the), <i>A. Martin</i> and <i>Gy. Targonski</i>	» 1182
Uniqueness of the orbital angular momentum operators (L.), <i>J. R. Shewell</i>	» 1010

MECCANICA STATISTICA

Résolution électronique analogique de problèmes statistiques d'accumu- lation poissonienne, <i>G. Bizard</i> et <i>J. Seguinot</i>	» 836
---	-------

MESONI LEGGERI

Alpha-particle wave functions and the muon capture in ^4He (L.), <i>A. Bietti</i>	» 1043
Decay of negative π -mesons stopped in light elements and insulators (The), <i>G. Culligan</i> , <i>D. Harting</i> , <i>N. H. Lipman</i> , <i>L. Madansky</i> and <i>G. Tibell</i>	» 351
Direct electronic decay of three π^0 's emitted from an antineutron anni- hilation star, <i>Tsai-Chü</i> and <i>C. Simonin-Haudecoeur</i>	» 1102
Evidence for pion-pion interactions from s -wave pion-nucleon scattering, <i>J. Hamilton</i> , <i>P. Menotti</i> , <i>T. D. Spearman</i> and <i>W. S. Woolcock</i> . .	» 519
Internal pairs from π^- -proton interactions at rest, <i>H. Kobrak</i>	» 1115
Meson production in nucleus-nucleus collisions, <i>G. Alexander</i> , <i>J. Avidan</i> , <i>A. Avni</i> and <i>G. Yekutieli</i>	» 648
Modification of the Chew-Low formula for the $(\frac{3}{2}, \frac{3}{2}) \pi-N$ resonance (L.), <i>W. M. Layson</i>	» 1207
Muonium-antimuonium transitions (L.), <i>S. L. Glashow</i>	» 591
Photons from the radiative pion decay, <i>D. M. Binnie</i> , <i>S. L. de S. Barros</i> and <i>B. D. Hyams</i>	» 140
Pion-hyperon scattering, <i>M. M. Islam</i>	» 161

MESONI PESANTI

Application of the Chew and Low extrapolation procedure to $K^- + d \rightarrow$ $\rightarrow Y + N + \pi$ absorption reactions (L.), <i>J. S. Dowker</i>	» 182
Associated production of strange particles, <i>M. Gourdin</i> and <i>M. Rimpault</i>	» 1166
Consequences of charge independence for K^+ -nucleon interactions (On some), <i>V. De Santis</i>	» 983
Decay modes and life-time of negative K-mesons (The), <i>B. Bhowmik</i> , <i>P. C. Jain</i> and <i>P. C. Mathur</i>	» 857
K^- absorption in ^4He - I: The hyperon-pion resonance, <i>M. M. Blok</i> , <i>E. B. Brucker</i> , <i>R. Gessaroli</i> , <i>T. Kikuchi</i> , <i>A. Kovacs</i> , <i>C. M. Meltzer</i> , <i>R. Kraemer</i> , <i>M. Nussbaum</i> , <i>A. Pevsner</i> , <i>P. Schlein</i> , <i>R. Strand</i> , <i>H. O.</i> <i>Cohn</i> , <i>E. M. Harth</i> , <i>J. Leitner</i> , <i>L. Lendinara</i> , <i>L. Monari</i> and <i>G. Puppi</i>	» 724
K-meson-nucleon scattering, <i>M. M. Islam</i>	» 546
Model for S -wave $\bar{K}-N$ scattering (A), <i>B. H. Bransden</i> , <i>H. Rashid</i> and <i>R. G. Moorhouse</i>	» 213

Modified static equations for the $K\pi$ -interaction. Effect of pion-pion resonance, <i>B. W. Lee</i> and <i>K. S. Cho</i>	pag. 553
Note on the final state interaction in $K_{2\pi}^+$ decay (A) (L.), <i>K. Kawarabayashi</i>	» 1030
Partial wave dispersion relations in \bar{K} -nucleon absorption - I, <i>R. G. Moorhouse</i>	» 123
Pion-hyperon resonance from \bar{K} -nucleon Coulomb constructive S -wave parameters (L.), <i>G. Costa</i> , <i>F. Ferrari</i> and <i>M. Pusterla</i>	» 1224
Proposed experimental test of the Day, Snow and Sucher argument based on antiproton annihilation into kaons (L.), <i>B. d'Espagnat</i>	» 1217
Remarks about the photoproduction of strange particles (Some) (L.), <i>M. Gourdin</i>	» 1035
Simplectic simmetry (On the) (L.), <i>A. Salam</i> and <i>J. C. Ward</i>	» 1228
Three-body final states from K^- -capture in helium and deuterium, <i>M. M. Block</i>	» 715

NUCLEI - FISICA NUCLEARE

Angular distribution of protons from the reaction $^{28}\text{Si}(n, p)^{28}\text{Al}$, <i>L. Colli</i> , <i>G. M. Marazzan</i> , <i>F. Merzari</i> , <i>P. G. Sona</i> and <i>P. Tomaš</i>	» 928
$\beta^+ \rightarrow \gamma$ angular correlation in the decay of ^{22}Na (L.), <i>B. N. Subba Rao</i>	» 178
Decay scheme of ^{128}Cs (On the), <i>S. Jha</i> , <i>R. K. Gupta</i> , <i>H. G. Devare</i> , <i>G. C. Pramila</i> and <i>K. P. Gopinathan</i>	» 76
Diffusione elastica di raggi γ di 1.25 MeV in piombo, <i>G. Manuzio</i> e <i>S. Vitale</i>	» 638
Effect of inelastic scattering on polarization asymmetry, <i>G. Felsner</i> and <i>M. E. Rose</i>	» 509
Effect of the exclusion principle on the real part of the optical potential (The) (L.), <i>J. Dabrowski</i> and <i>A. Sobieczewski</i>	» 403
Further studies on the decay of ^{132}Cs , <i>S. Jha</i> , <i>R. K. Gupta</i> , <i>H. G. Devare</i> and <i>G. C. Pramila</i>	» 1067
Model of α -decay consistent with α -reactions (A), <i>J. Osada</i> , <i>R. D. de Oliveira</i> , <i>N. Martins</i> and <i>T. Miyazima</i>	» 845
(n, α) and (n, p) reactions in CsI crystal with 14 MeV neutrons, <i>G. M. Marazzan</i> , <i>E. Menichella Saetta</i> and <i>F. Tonolini</i>	» 903
Note on the deuteron photodisintegration (A) (L.), <i>V. De Alfaro</i> and <i>C. Rossetti</i>	» 194
Pick-up reaction on the nuclides ^{45}Sc , ^{51}V , ^{52}Cr , ^{54}Fe , ^{56}Fe , ^{55}Mn , ^{59}Co , ^{58}Ni and ^{60}Ni (The), <i>L. Colli</i> , <i>I. Iori</i> , <i>S. Micheletti</i> and <i>M. Pignanelli</i>	» 94
Polarization in proton-beryllium and proton-proton scattering at 1.7 GeV, <i>P. Bareyre</i> , <i>J. F. Detoeuf</i> , <i>L. W. Smith</i> , <i>E. D. Tripp</i> and <i>L. Van Rossum</i>	» 1049
Polarization of \bar{p} in $\bar{p}C$ scattering (L.), <i>P. K. Srivastava</i>	» 172
Stopping power of C for ^{210}Po α -particles, <i>S. Barkan</i>	» 443

NUCLEONI

Interaction of high-energy protons from the CERN proton synchrotron with photographic emulsion nuclei (L.), <i>C. Brieman</i> , <i>M. Osejthy-Barth</i> , <i>J. P. Lagnaux</i> and <i>J. Sacton</i>	» 1017
---	--------

Nuclear excitation and multiple production in proton-nucleon collisions at CERN-PS energies (L.), <i>G. Cvijanovich, B. Dayton, P. Egli, B. Klaiber, W. Kock, M. Nicolić, R. Schneeberger, H. Winzeler, J. C. Combe, W. M. Gibson, W. O. Lock, M. Schneeberger and G. Vanderhaeghe</i>	pag. 1012
Transverse momentum of particles emitted in 4.2 GeV proton-proton collisions, <i>M. H. Blue, J. J. Lord, J. G. Parks and C. H. Tsao</i> . . .	274

PLASMI

Collective motions in a plasma due to magnetic interaction (L.), <i>G. Kalman</i> . . .	198
Corrélation du champ électrique dans un plasma (L.), <i>I. Fidone</i> . . .	1219
Plasma oscillations with special emphasis on the Landau damping and the Gross gaps in the frequency spectrum (On), <i>A. Kildal</i>	104

RADIOATTIVITÀ

Branching ratio of α and β emission from $^{212}\text{Bi}(\text{ThC})$, <i>S. Barkan</i>	450
--	-----

RAGGI COSMICI

Azimuthal symmetry in 27 GeV jets (L.), <i>C. Castagnoli, C. Lamborizio, I. Ortalli and A. Barbaro Galtieri</i>	416
High-energy interactions of a heavy primary in emulsion, <i>G. Biczó, G. Bozóki, E. Fenyves and E. Gomboi</i>	662
Latitude-dependence of a Forbush type decrease, <i>L. Vir and P. S. Gill</i> . . .	498
Primary cosmic-ray α -particles - II, <i>A. Engler, F. Foster, T. L. Green and J. Mulvey</i>	1157
Production of atmospheric neutrons by solar γ -rays (L.), <i>K. Maeda</i> . . .	587
Studies on extensive air showers - Part II: Sea level observations on the fluctuations in the densities of N-particles, in showers of the same size, <i>B. K. Chatterjee, G. T. Murthy, S. Naranan, B. V. Sreekantan and M. V. Srinivasa Rao</i>	237
Verification at 27 GeV of a formula for the determination of the primary energy of jets, <i>A. Barbaro Galtieri, G. Baroni, A. Manfredini, C. Castagnoli, C. Lamborizio and I. Ortalli</i>	487

RELATIVITÀ

Dimensionless quantities, spacelike intervals and proper time in general relativity, <i>A. Finzi</i>	1079
Energy-momentum tensor of the gravitational field (On the), <i>F. R. Tangherlini</i>	I
Note on circular gravitational orbits (L.), <i>P. Goldhammer</i>	1205
Spin precession in classical relativistic mechanics, <i>H. C. Corben</i>	529

INDICE DELLE RECENSIONI

J. L. SYNGE - <i>Relativity. The General Theory</i>	pag. 208
L. V. GROSHEV, V. N. LUTSENKO, A. M. DEMIDOV and V. I. PELEKHOV - <i>Atlas of γ-Ray Spectra from Radiative Capture of Thermal Neutrons</i>	» 209
F. H. CLAUSER - <i>Symposium on Plasma Dynamics</i>	» 209
H. JONES - <i>The Theory of Brillouin Zones and Electronic States in Crystals</i>	» 210
L. DRESNER - <i>Resonance Absorption in Nuclear Reactors</i>	» 210
A. ZUCKER, F. T. HOWARD and E. C. HALBERT - <i>Reactions between Complex nuclei. Proceedings of the Second Conference on Reactions between Complex Nuclei</i>	» 211
D. BLANC et G. AMBROSINO - <i>Eléments de physique nucléaire</i>	» 427
R. C. KOCH - <i>Activation Analysis Handbook</i>	» 427
M. BURTON, J. S. KIRBY-SMITH and J. L. MAGEE - <i>Comparative Effects of Radiation</i>	» 601
E. M. PUGH and E. W. PUGH - <i>Principles of Electricity and Magnetism</i>	» 603
J. IRVING and N. MULLINEUX - <i>Mathematics in Physics and Engineering</i>	» 814
S. YIFTAH, D. OKRENT and P. A. MOLDAVER - <i>Fast Reactor Cross-Sections. A Study Leading to a 16 Group Set</i>	» 815
N. N. BOGOLIOUBOV et D. V. CHIRKOV - <i>Introduction à la théorie quantique des champs</i>	» 1046
D. A. BROMLEY and E. W. VOGT - <i>Proceedings of the International Con- ference on Nuclear Structure</i>	» 1047
E. M. PUGH and E. W. PUGH - <i>Principles of Electricity and Magnetism</i>	» 1231
M. W. WOLKENSTEIN - <i>Struktur und physikalische Eigenschaften der Moleküle</i>	» 1232

Fine del Volume XX, Serie X, 1961

PROPRIETÀ LETTERARIA RISERVATA

Direttore responsabile: G. POLVANI

Tipografia Compositori - Bologna

Questo fascicolo è stato licenziato dai torchi il 30-VI-1961.

